

Lice and Mites.

Some years ago the Farmers' Review sent out an inquiry to its poultry readers asking what were the leading causes of losses among the early broods of chickens. It was no surprise to the editor when the reply came back that the greatest cause of loss to chicks was lice an mites. Some of the poultry raisers estimated that no less than 30 per cent of all the chicks hatched were annually killed off by these two pests, of which the mites were the worst. It is safe to say that if any farmer can manage to exterminte these insects and keep them out of his flock he will increase the profits from his poultry at least 50 per cent, without anything else be-

The body lice of fowls are quite easily kept off by the use of a dust bath and by the use of grease on the heads, around the tail feathers and under the wings. Perhaps some should be put at the base of the wing feathers. These body lice become smeared with the grease, their pores become filled and death quickly follows. Not so easily handled are the mites. One would have to keep the birds covered with grease all the time and all over to protect them from the ravages of these little pirates. The mites do not stay on the bodies of the birds in the daytime, but go onto the birds at night, fill themselves with blood and scurry back to their hiding places under the roosts between the cracks of the boards, and under any object that gives them a hiding place. To grease the birds every day would kill the birds themselves in time and would be a task not to be thought of. The insects must then be fought on the roosts and in their hiding places. Once they have become established the task of getting rid of them is a colossal one, as many of our readers have discovered. We have seen poultry houses in which we believed this could not be done on account of the irregularity of construction. When houses are loosely thrown together there are so many seams and cracks, so many apertures behind slivers, so many rotten holes in posts, to say nothing of nail holes and knot holes, that a pest of this kind can become thoroughly intrenched. Fire and kerosene and paint are the three chief weapons for carrying on the fight. A well-built poultry house permits of the use of paint for closing the cracks and for the use of fire in cleansing the roosts, provided the roosts are movable and can be taken out of doors. Where the poultry house is of cruder construction thick whitewash should be used liberally till the freshly slaked lime has filled every cranny. Fortunately lime is cheap and can be used ad libitum.

Young chickens should not be allowed to sleep in a poultry house where it is known that mites exist, as the parasites are almost certain to find them and sap their vitality without the owner ever suspecting it. If the chicks are put in a place by themselves, of course in the care of the old hen, they will be out of the reach of the mites. The only parasites to be guarded against then will be the body lice. Use only lard for this and do not overdo it, putting on the lard as we have indicated for the old hens. Kerosene is not necessary, and it is too harsh to apply to the very tender skins of the chicks.-Farmers' Review.

Age of Market Birds.

Nothing is more important to the average buyer of poultry than to know how to distinguish good and bad, old and young birds, says H. W. Atwater of the United States Department of Agriculture. A good, fresh bird shows a well-rounded form with neat, compact legs and no sharp, bony angles two railroad bauls

on the breast, indicating a lack of tender white meat. The skin should be a color (yellow being preferred in the American market) and free from blotches and pinfeathers. The flesh should be neither flabby nor stiff, but should give evenly and gently when pressed by the finger.

In a fresh bird, the feet feel moist, soft and limber, and if dressed with the head on the eyes look bright and full. As it becomes stale the eyes shrink and the feet dry and harden; when too stale, i. e., when decomposition is well under way, the body turns dark and greenish. Cold storage birds are commonly packed so closely that the wings remain pressed against the body even after the birds have been unpacked for some time. They can usually be distinguished by the squeezed look from fresh birds, which should lie or hang in a natural position.

One of the commonest ways of testing the age of dressed poultry is to take the end of the breastbone farthest from the head between thumb and finger and attempt to bend it to one side. In a very young bird, say a "broiler" chicken or a green goose, it will be easily bent, like the cartilage in the human ear; in a bird a year or so old it will be brittle, and in an old bird tough and hard to bend or break. If the feet are left on the carcass they furnish a test of the age. In a young bird they are soft and smooth, becoming hard and rough as the bird grows older. The claws are short and sharp in a young bird, becoming longer and blunter with age and use. The spur above the foot is also to be observed; when the bird is very young, like a "broiler" chicken, it is hardly apparent; a few months later it is long, but straight, in a mature state it is larger still and crooked at the end. It is more developed in males than in females and capons. Turkeys up to a year old are said to have black feet, which grow up to three years old and then turn gradually gray and dull. The age of pigeons can sometimes be told by the color of the breast. In squabs the flesh looks whitish as seen through the skin, but becomes more and more purplish as the birds grow older. Red feet are said to be a sign of age in a pigeon.

Hatching Chicks.

In hatching we commence in January, using both hens and incubators. We take cracker boxes cut in two, place dampened earth in the bottom shaped into a nice nest to fit the hens and fine chaff from timothy hay on top of this. Straw does not do, as it is so loose. The air circulates through it and tends to kill the germ. We use insect powder plentifully during incubation, testing out the infertile eggs after the tenth day, which must be done for best results. Dead germs and infertile eggs are damaging to the live germs, often killing them.

The fact that the Orpingtons want to set every month in the year enables us to have plenty of broody hens. Also to get the best results from our incubators, we set a sufficient number of hens at the same time and on the nineteenth day have our incubators all ready and transfer the eggs. Every fertile egg is thus hatched out and we can utilize our hens right over again.

We feed a dry food only until the chicks are old enough to alternate with cracked wheat, corn, oats, etc.

J. W. Eastes, Knox Co., Ill.

Will the Cattle Feeder Disappear? Senator Harris of Kansas recently expressed the opinion that the professional cattle feeder will disappear, at least on the high-priced lands east of the Mississippi river. He says that it will no longer pay a man to purchase feeders at a high price, put expensive corn into them and sell them on the market at the prices cattle are now bringing. The man that raises the calf will be the one that will market him as a finished steer and get out of him all there is in him. In this way he will, in addition to his other profits, save the cost of

Russia's Commissariat Problem.

France Militaire contains an interesting study of the commissariat problem of the Russian army. For an army of 300,000 men and 100,000 horses, 1,000 tons of food and fodder are required. This amount can be transported in six trains composed of from thirty to forty-five cars, the loading of which requires not more than a day. But there are already at Mukden, Port Arthur and other points in Manchuria provisions for six months, and Manchuria and the Russian coast provinces are lich in grain and cattle. According to this study, in September Russia can dispose of 60,000 tons of grain produced on the spot, in addition to 700,000 cattle and a vast quantity of pigs. During the summer the service which will be rendered by the waterways will relieve the Trans-Siberian road.

Fine Gown for Beautiful Woman.

Search is being made here for the most beautiful woman in America to wear the most expensive and beautiful gown in America. The gown in question is in the bonded warehouse at St. Louis, and is estimated to be worth \$5,000, being almost an exact duplicate of the one that the first wife of Napoleon Bonaparte wore when he placed the imperial crown upon her brow The original gown cost \$200,000, and the duplicate, which has been made by a celebrated man milifner, is only less expensive in its jewels and decoration, for the material and the design are carried out faithully. For splendor and unequared delicacy of taste this garment is the chief marvel of the dressmaking

King Edward is not so tall as many people imagine and whenever his majesty is photographed in a group he is invariably put to stand on some small eminence, such as a step, in order that he may compare as well as possible with those about him. In his stockings he is just 5 feet 7 inches. His majesty wears boots with high heels, and his total height as he walks is 5 feet 8 1-2 inches.



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No. 19-1904